Replace the paragraph starting on page 9, line 5 with the following:

B3

In one general embodiment, the stent is formed of a shape-memory alloy having a final austenite transition temperature of between about 25°C and 37°C. This feature allows the stent to be carried in the catheter in a martensitic state, and assume its preformed, austenitic shape when expelled from the catheter and exposed to the higher body temperature at the target site. In another embodiment, the shape-memory alloy has a transition temperature M_d greater than 37°C, below which the alloy retains sufficient stress-induced martensitic property to allow placement of the stent at or above its A_f. In other words, this allows the stent to be carried in the catheter in a stress-induced martensitic (SIM) state, and recover its preformed, austenitic shape when released from the constraints of the catheter, at a temperature that may be substantially above the final austenite temperature without significant plastic, or otherwise permanent deformation. In this embodiment, the final austenite temperature may be quite low, *e.g.*, 4°C, or it may be room temperature or higher.

Replace the paragraph starting on page 10, line 11 with the following:

B4

Nitinol cylindrical tubes having a martensite temperature M_D below which the alloy can assume a stress-induced martensitic condition while being stressed to the extent necessary to place or otherwise use the device, of greater than about 37°C, preferably greater than about 40°C, are also prepared according to known methods, *e.g.*, U.S. Pat. No. 4,505,767. For example an ideal alloy would act, at about 37°C, as a constant force spring over a strain range up to about 5% or more. This is a measurement of the degree to which an alloy, at a given temperature, can be strained in a purely austenitic state by the formation of stress-induced martensite without significant plastic deformation. In other words, the strain caused by the application of a given stress at a given temperature is substantially recoverable. In practice, the maximum stress realized occurs sometime during the process of placing a nitinol device at a given temperature. Accordingly, a suitable alloy will provide a device that is capable of substantially recovering its austenitic shape without significant plastic deformation, upon placement in the body.

In the Claims: Replace claims 1 and 4 with the following rewritten claims:

1. (Twice Amended) A stent designed for catheter delivery to a target neurovascular site via a tortuous path in a contracted state, and deployment at the target site in an expanded state, comprising

a plurality of expandable tubular members, each member being composed of a continuous wire element forming a plurality of wave segments, each segment containing a pair of opposite looped peaks and having a wave shape such that, in the stent's expanded state, the distance between adjacent sides of a wave on proceeding from a peak toward opposite peaks, increases monotonically with an inflection point

35 therebetween, and in the stent's contracted state, the distance between adjacent sides of a wave is a minimum at a point intermediate opposite peaks, and

axial connectors joining one or more confronting peaks of adjacent tubular members,

wherein radial expansion of the stent from its contracted to its expanded state is accommodated by movement of adjacent wave-segment peaks away from one another, without significant change in the axial dimension of the stent.

36 4. (Amended) The stent of claim 2, which has an austenite phase transition temperature below body temperature.